

IN THE CLAIMS:

1-21. (Canceled)

22. **(Previously Presented)** An X-ray system ~~having~~including an X-ray emitter and an X-ray-sensitive camera for the creation of dental X-ray images, which said camera includesincluding a first and a second image detector, wherein said first image detector isbeing provided for the creation of a panoramic tomographic image of upper and lower jawbones of a patient and said second image detector isbeing a face sensor for the creation of a 2D image, and including means areprovided for the creation of 3D images of a subvolume of the a mandibular arch of the patient, which means create several 2D images from different directions and compute a 3D image therefrom using cone beam technology with associated reconstruction algorithms, and including adjustment means by means of which for adjusting said camera and/or said second image detector and/or said X-ray emitter and/or a primary diaphragm and/or combinations thereof areadjusted such that said second image detector present in said camera is positioned in the an optical path of said X-ray emitter.

23.-25. (Canceled)

26. **(Previously Presented)** An X-ray system as defined in claim 22, including adjustment means and/or control means by means of which said camera and an X-ray emitter are adjusted such that a

center of rotation lies in a subvolume to be imaged and both moved as a unit.

27. **(Previously Presented)** An X-ray system as defined in claim 22, wherein said adjustment means are provided in said casing of said camera or in connecting means between said camera and a support or on said support itself.
28. **(Currently Amended)** An X-ray system ~~as defined in claim 22~~including an X-ray emitter and an X-ray-sensitive camera for the creation of dental X-ray images, said camera including a first and a second image detector, said first image detector being provided for the creation of a panoramic tomographic image of upper and lower jawbones of a patient and said second image detector being a face sensor for the creation of a 2D image, and including means for the creation of 3D images of a subvolume of a mandibular arch of the patient, which means create several 2D images from different directions and compute a 3D image therefrom using cone beam technology with associated reconstruction algorithms, and including adjustment means for adjusting said camera and/or said second image detector and/or said X-ray emitter and/or a primary diaphragm and/or combinations thereof such that said second image detector present in said camera is positioned in an optical path of said X-ray emitter, and including an installation for the creation of teleradiographic images with another image detector

and, when said X-ray emitter is aligned for the creation of a teleradiographic image, said camera is disposed in the region of the optical path between said X-ray emitter and said image detector of said installation for the creation of teleradiographic images and is radiolucent in said region.

29. **(Currently Amended)** ~~An X-ray system as defined in claim 22~~ including an X-ray emitter and an X-ray-sensitive camera for the creation of dental X-ray images, said camera including a first and a second image detector, said first image detector being provided for the creation of a panoramic tomographic image of upper and lower jawbones of a patient and said second image detector being a face sensor for the creation of a 2D image, and including means for the creation of 3D images of a subvolume of a mandibular arch of the patient, which means create several 2D images from different directions and compute a 3D image therefrom using cone beam technology with associated reconstruction algorithms, and including adjustment means for adjusting said camera and/or said second image detector and/or said X-ray emitter and/or a primary diaphragm and/or combinations thereof such that said second image detector present in said camera is positioned in an optical path of said X-ray emitter, and including an installation for the creation of teleradiographic images with another image detector and the path of adjustment is such that, when the X-ray emitter is

aligned for the creation of a teleradiographic image, said camera is moved out of the optical path between said X-ray emitter and said image detector of said installation for the creation of teleradiographic images.

30. **(Previously Presented)** An X-ray system as defined in claim 22, wherein said camera is mounted for eccentric displacement and, in a first position, said image detector is positioned in an X-ray fan beam for the creation of a panoramic tomographic image and, in a second position, said image detector is positioned in the X-ray fan beam for the creation of a 3D image.
31. **(Previously Presented)** An X-ray-sensitive camera, comprising a first X-ray-sensitive image detector for the creation of a tomographic image, a second X-ray-sensitive image detector for the creation of plane images and wherein the two image detectors are disposed in a common casing, and said second image detector is disposed alongside said first image detector and including adjustment means for the purpose of causing, as desired, said first image detector or said second image detector to assume correct alignment relative to an X-ray emitter for the creation of the respective X-ray image, wherein said second image detector is disposed on a rear side of said first image detector.
32. **(Canceled)**

33. **(Previously Presented)** A camera as defined in claim 31, wherein said adjustment means and the two image detectors are housed in a common casing of said camera.
34. **(Previously Presented)** A camera as defined in claim 33, wherein said adjustment means are provided on said casing of said camera and in a region of connecting means for the attachment of said camera to a support and said camera is variably displaced, as an entity, relatively to said connecting means.
35. **(Canceled)**